

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/S17,543
Source: PCT
Date Processed by STIC: 12-20-04

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 12/20/2004

PATENT APPLICATION: US/10/517,543

TIME: 13:10:36

Input Set : A:\3462.txt

Output Set: N:\CRF4\12202004\J517543.raw

3 <110> APPLICANT: Minobe, Yuzo
 4 Monna, Lisa
 5 Suzuki, Junko
 6 Ohta, Rieko
 7 Nemoto, Hiroshi
 8 Osamu, Ideta
 10 <120> TITLE OF INVENTION: Methods for Distinguishing Rice Varieties
 12 <130> FILE REFERENCE: 3462.1013-000
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/517,543
 C--> 15 <141> CURRENT FILING DATE: 2004-12-10
 17 <150> PRIOR APPLICATION NUMBER: JP 2002-168875
 18 <151> PRIOR FILING DATE: 2002-06-10
 20 <160> NUMBER OF SEQ ID NOS: 114
 22 <170> SOFTWARE: PatentIn Ver. 2.1
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 900
 26 <212> TYPE: DNA
 27 <213> ORGANISM: Oryza sativa
 29 <220> FEATURE:
 30 <221> NAME/KEY: variation
 31 <222> LOCATION: (309)
 32 <223> OTHER INFORMATION: /cultivar="ksh, krr, tgr, mnk, yma, tkh, akk, mtb,
 33 hit, mmm, fom, don, or ssk"
 34 /note=" "c" replaced with "t" "
 36 <220> FEATURE:
 37 <221> NAME/KEY: variation
 38 <222> LOCATION: (438)
 39 <223> OTHER INFORMATION: /cultivar="ksh, krr, tgr, mnk, yma, tkh, akk, mtb,
 40 hit, mmm, fom, don, or ssk"
 41 /note=" "a" replaced with "g" "
 43 <220> FEATURE:
 44 <221> NAME/KEY: variation
 45 <222> LOCATION: (593)
 46 <223> OTHER INFORMATION: /cultivar="ksh, krr, tgr, mnk, yma, tkh, akk, mtb,
 47 hit, mmm, fom, don, or ssk"
 48 /note=" "c" replaced with "t" "
 50 <400> SEQUENCE: 1
 51 tattcttcac gtgattcagc gaagataaca ctctttaaac actgcaattg ccactggaag 60
 52 aattagcacg aatttgagat gttttttcac cggaagataa gttcataact aagggtgttc 120
 53 ttcggtttcaa caaacaagat ataaagttca accagatttt acatttttga aaacctttta 180
 54 tctttacata tatcagtggg ggagttgaaa tgggagatac atcaactcta aattagagaa 240
 55 atttttagga tacaactaaa caagtttaac caaatttccc ttgtcctaaa cagcaaatga 300
 56 ttcagtgaca cattggggtg atttagcgac ttcaaaccta ttgtcttctt tttcattttt 360

(ps.6)

RAW SEQUENCE LISTING

DATE: 12/20/2004

PATENT APPLICATION: US/10/517,543

TIME: 13:10:36

Input Set : A:\3462.txt

Output Set: N:\CRF4\12202004\J517543.raw

```

57 caaatttcta gctctacaac taattcaatg actactcagt ttaaaacaaa acaaattggaa 420
58 gattggttgg gagatttaag aagaaacttg ccagggtggtg gcttggtccg tggaggaaaag 480
59 agggctcagg ggctaaccac ctcgcaactt agggctctgg cctccgtctc ccgccttttc 540
60 gccgagagcc cgcaagggtga cagagtgcgg cgagggtcgac acttcggccg ttcgggggtcg 600
61 ccgcgtcggg cgtccggggcg gcgtcgtggt tcgggggact gagggcagct actcagctag 660
62 accgctggag cccaaaggaa tctaaggtta catgctgtct tgttgagcct attttatggg 720
63 cctgcgactt tgcagttagc cgaggcatat tgggaataaat ttaatttagg tctctcaatt 780
64 tgtcgtcgag cctgaaattc atcactggac cgcaaaacta gatacatcgc attccccaac 840
65 ttagttaagg tagcagtggg ggtgggcagc cagcgaggag ggccgtggtg gtccgtgatg 900
68 <210> SEQ ID NO: 2
69 <211> LENGTH: 960
70 <212> TYPE: DNA
71 <213> ORGANISM: Oryza sativa
73 <220> FEATURE:
74 <221> NAME/KEY: variation
75 <222> LOCATION: (304)
76 <223> OTHER INFORMATION: /cultivar="yki, krr, tgr, ghm, mnk, yma, hez, ksh,
77     akk, hnh, hit, mmm, fom, or ssk"
78     /note=" "a" replaced with "t" "
80 <400> SEQUENCE: 2
81 tttaacttta ttgtagtat tagtactagc tctggttgtc tatcactctg ctgcctctgc 60
82 acatactgat ctagaacaca catgttctct acttctctgc agtcaactgct actgacatgt 120
83 gggccctact ctctttgggc cagcatgtca gtgtcagcag aggatctcat tcctacagtc 180
84 aatccatgtg tgctactccg ttaaaaaaac gaattccaag ctacaaacct aaacacgttt 240
85 ttttggacgg aggggtatat ataaacaaaag aaaaagcact gtaggtacat aatatagtac 300
86 tagatcagtc ttattacagc tgttcaaaaa cagttcagta tatagtgaat ctagttggtc 360
87 tgttgctact gcagttaatt ggctctggtt gcttttggtg atctgttgct actgcagtta 420
88 attagctccg gttgcttagt tgatcaagtt aattagctct ggctgtgccc taatcaaaat 480
89 tcataatatag tagcttcaag cagcacatac cacctttcct accttctggt ggatactcct 540
90 ctcttttata atttctgcag taagcttgaa acataagtag acactgccat taattaaaca 600
91 agcacagtga attaaccagc atatgtgtaa tctgcatact aattaaatta gggtcgtgcc 660
92 agttcaaggc agccacaacc acatacaggc gatccatata ttgatttata tatctgatcc 720
93 gtttggtgag gttggtgcat caatcccccc tgaagcagct atgtcgagcc taattgcgat 780
94 ttgattaatc aatttttctc atccaacgat ttaattatgc gtgattttaa tgattcgatc 840
95 ggtacagttt tttttctctt tcttcagtgc tagtgcttct actagtattc gtgacaataa 900
96 cctgtcggat ttggaatata tgattgctga tgtggtgtcg tttttattaa caagcccttg 960
99 <210> SEQ ID NO: 3
100 <211> LENGTH: 840
101 <212> TYPE: DNA
102 <213> ORGANISM: Oryza sativa
104 <220> FEATURE:
105 <221> NAME/KEY: variation
106 <222> LOCATION: (201)
107 <223> OTHER INFORMATION: /cultivar="ksh, hts, mth, yki, krr, tgr, ghm, mnk,
108     yma, hez, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
109     fom, don, knh, or ssk"
110     /note=" "a" replaced with "t" "
113 <220> FEATURE:
114 <221> NAME/KEY: variation

```

RAW SEQUENCE LISTING

DATE: 12/20/2004

PATENT APPLICATION: US/10/517,543

TIME: 13:10:36

Input Set : A:\3462.txt

Output Set: N:\CRF4\12202004\J517543.raw

```

115 <222> LOCATION: (356)
116 <223> OTHER INFORMATION: /cultivar="ksh, hts, mth, yki, krr, tgr, ghm, mnk,
117     yma, hez, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
118     fom, don, knh, or ssk"
119     /note=" "a" replaced with "g" "
122 <220> FEATURE:
123 <221> NAME/KEY: variation
124 <222> LOCATION: (450)
125 <223> OTHER INFORMATION: /cultivar="ksh, hts, mth, yki, krr, tgr, ghm, mnk,
126     yma, hez, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
127     fom, don, knh, or ssk"
128     /note=" "g" replaced with "a" "
130 <220> FEATURE:
131 <221> NAME/KEY: variation
132 <222> LOCATION: (514)
133 <223> OTHER INFORMATION: /cultivar="ksh, hts, mth, yki, krr, tgr, ghm, mnk,
134     yma, hez, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
135     fom, don, knh, or ssk"
136     /note=" "c" replaced with "t" "
138 <220> FEATURE:
139 <221> NAME/KEY: variation
140 <222> LOCATION: (515)
141 <223> OTHER INFORMATION: /cultivar="ksh, hts, mth, yki, krr, tgr, ghm, mnk,
142     yma, hez, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
143     fom, don, knh, or ssk"
144     /note=" "a" replaced with "g" "
146 <220> FEATURE:
147 <221> NAME/KEY: variation
148 <222> LOCATION: (552)
149 <223> OTHER INFORMATION: /cultivar="ksh, hts, mth, yki, krr, tgr, ghm, mnk,
150     yma, hez, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
151     fom, don, knh, or ssk"
152     /note=" "c" replaced with "t" "
154 <220> FEATURE:
155 <221> NAME/KEY: variation
156 <222> LOCATION: (695)
157 <223> OTHER INFORMATION: /caltivar="ksh, hts, mth, yki, krr, tgr, ghm, mnk,
158     yma, hez, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
159     fom, don, knh, or ssk"
160     /note=" "a" replaced with "g" "
162 <400> SEQUENCE: 3
163 tagcattagg ataaaagggg cgctccttca aaacttttaa atatcaaaga acaccctttt 60
164 gagattgaat tgcttcttct ggtctttgcc tcttctttcg cttttcagca ccagaatcgt 120
165 acttctctatt tctagctgac ataatgagga ttgaggaaat aagtgtcttc ctatttcata 180
166 aacaaaagaa aagtaatttg agtcaaacag tcacatcact atttaagttt tgattcaatc 240
167 gatagtttga ttcataattac atctactatt tgatacgaga ctcaatgtct caactcttaa 300
168 gtctaaaagt aactttccaa tgctgcacaa aggtagtagt cagggacacg aagataagtg 360
169 gatgagaggc actgacaaag gtagccggcc aaccgcttgg cattgatggc gcttgcccg 420
170 tggctcgctcg ctgcctcgtg ttgggctggg gtcgggactt tgcaggcatc gtcatttcac 480

```

RAW SEQUENCE LISTING

DATE: 12/20/2004

PATENT APPLICATION: US/10/517,543

TIME: 13:10:36

Input Set : A:\3462.txt

Output Set: N:\CRF4\12202004\J517543.raw

```

171 cgtcgaattt gaaatcgaga ttgactccag tcacacgaca tgactacaca acagtgtgac 540
172 ttgatctcgt tcgcctctca gcctccaatg cacctgatgg cagatgggcc tctctaatacg 600
173 attcacaggt agaagcagga ttgtggctcg gctatgcatt aatgtgcgcc tctccgatta 660
174 acttgggtgc cccaaaaaaa ttgggggaca ctctatcatc gccaatgtcg cacacaacct 720
175 tcgacaggct tgcccattag tgtgacactc ctgcccacat cactgctcca ttgtcatcca 780
176 tcaccttgtc gaccattgtg gtgtgccaaa ccgcggctgt cgtctgtttg tgattttgta 840
179 <210> SEQ ID NO: 4
180 <211> LENGTH: 960
181 <212> TYPE: DNA
182 <213> ORGANISM: Oryza sativa
184 <220> FEATURE:
185 <221> NAME/KEY: variation
186 <222> LOCATION: (377)
187 <223> OTHER INFORMATION: /cultivar="ksh, ymt, don, or knh"
188 /note=" "t" replaced with "c" "
190 <400> SEQUENCE: 4
191 tccaaaatcc acatgcaatg tgccattcca taggaatttc atgggatttg aaaatcgta 60
192 atcctttgaa tcaaatggcc aaataggaaa atttcgtata ggatttgaat cctatgaaaa 120
193 tcctatataa atcctttgat tcaaagggcc ctaagtttcg tacgtgtgca actgtgcatc 180
194 cagcacgtac tactacgtac tcctatgtac ttgtagtgtg gtagcctata catatgcatg 240
195 aagcgttcca ggaaaaatag gagtctcagt aatttgtgca ggcatgcggc ccatggagta 300
196 atagaccatg ctgaataatt tcagttcaaa ttccatactc caactgtaat accatacgca 360
197 aaccatcaac ttacaatact gatatacttg acatttcaaa ataacatagc ctttggtttt 420
198 agctgacgta gcgactgagt aagctagcac gaggtcata tgggtcccac atgtcagcgg 480
199 cccaatcttc ttccacatct ctccctctct cccaatccta atctctctcc atgcctctag 540
200 ggtgggtggg gtgggaagaa gctcgacagc ggtggccaac acatacgcaa ggagaagctc 600
201 gaggactgca agacgacttt cttttcgctt accactggaa ggcaacacct tgtttccctg 660
202 ctttctagtt gagcgaggac actgaatgca tggaggtgtt gtgacccaaa tctacggcag 720
203 aatccctcgc cggaagttcg ccggagatct agcagagaag aggcgagaag aacagggtag 780
204 aaaggggaaa cacgaggaag cagctgggga ggaggatatt tttcatttct ttcatgaatt 840
205 gttttctcaa tacagctgga gtatatatac tcacgcactc caccctcttt gcccttaggg 900
206 cccaccttgt catagacact tctatctata aagagtagaa gatgtattca cttctgaaaa 960
209 <210> SEQ ID NO: 5
210 <211> LENGTH: 840
211 <212> TYPE: DNA
212 <213> ORGANISM: Oryza sativa
214 <220> FEATURE:
215 <221> NAME/KEY: variation
216 <222> LOCATION: (163)
217 <223> OTHER INFORMATION: /cultivar="hts, mth, yki, krr, yma, hez, ank, mmm,
218 fom, or don"
219 /note=" "t" replaced with "c" "
221 <400> SEQUENCE: 5
222 tgctgcatgt ttcagtccaa gctaggcgcc acagaacgga caaaagtaag aaaatcgcta 60
223 cgtacaactc acgtctgacc agcacttagc tgctaattgc cctagccaca tggagagaag 120
224 ttggtctcgc tgaagcgtaa cgattggcag ataaagttgg attggatggg aatcggacga 180
225 gggagtcgaa cgtatagcaa cactccagaa gtaaagcagt aaaccgaaaa agttttgcta 240
226 tcacttgatg gaccgtctcc acaagtggcg actggcacga catggccact cgacagaacc 300
227 gcacaacaaa tgctgacctt ttgcccttat tccatgcgaa gttgcgactt gcgagtcttt 360

```

RAW SEQUENCE LISTING

DATE: 12/20/2004

PATENT APPLICATION: US/10/517,543

TIME: 13:10:36

Input Set : A:\3462.txt

Output Set: N:\CRF4\12202004\J517543.raw

```

228 gggcagggca tgcactactg acaagatgaa agaagaaaat caaccgtaat tcgggcgtgc 420
229 actgctgcag aatagtcctt gtgatcatgt ccatgtgacc atgttcgtta cgttctgagg 480
230 cgtcgatagc gagcgatgct ggtaatcgtg accaatctcg ttcacgtcca ccttggtgac 540
231 gcgcacgtac gtcgctatat atgacaacgt cctgctacat atagccttgc tcactttcgg 600
232 actttgacgt atgtgaagag agcacgacta ggagccacta atcatatggg ttggtacatg 660
233 agaggatatg catgtttcac tttgcaccca acatgtactg tactcateta gtcatectac 720
234 tagtattttc catcggtgtc cctttctcct gtgatctctc gctttgcaca caaacctcgc 780
235 aacaaaacgg tctcgtgtgc gcctttcagc gcttcggcaa aggattgggc ggttcatgag 840
238 <210> SEQ ID NO: 6
239 <211> LENGTH: 900
240 <212> TYPE: DNA
241 <213> ORGANISM: Oryza sativa
243 <220> FEATURE:
244 <221> NAME/KEY: variation
245 <222> LOCATION: (515)
246 <223> OTHER INFORMATION: /cultivar="mth, krr, tgr, ghm, mnk, yma, ksh, akk,
247 ank, hnh, ymt, hit, mmm, fom, don, or knh"
248 /note=" "a" replaced with "g" "
250 <220> FEATURE:
251 <221> NAME/KEY: variation
252 <222> LOCATION: (624)..(626)
253 <223> OTHER INFORMATION: /cultivar="mth, krr, tgr, ghm, mnk, yma, ksh, akk,
254 ank, hnh, ymt, hit, mmm, fom, don, or knh"
255 /note=" "tgc" deleted"
257 <400> SEQUENCE: 6
258 aattattatt attattatth ccaatcagcc atatatatgg cttgccaaacc gatggcagca 60
259 caaatctttc gcgtccgtht gaacccattc ttcaaacttg aagttggatt tggacgtaat 120
260 agaaggtgca gttgttctact tgttcctggc atcaacgtgt acggttgaac aaatcggtgg 180
261 atctcttatg gttaacgtgc cctgttgatg tctgaaaacc catctgttct ttgttctaac 240
262 tcctatctta tcctctcatt ttttttcgct tgggtctcaac ttcgtgttct actagtthtg 300
263 aacgagtcac tcaactcggac tcgagagctc tgaacttctg aacaagccaa aatgctgtct 360
264 gaaccgagat cttcttggcg ctgtcagcct gtcacaaaact cgcaatccaa ttgcacttcc 420
265 agcggttgag caggttcaat tcaacatgac tttcatcagg agatggtaag ttaggaacag 480
266 attactgtca caactcaca cagttattac tactatcgca acaaagtcta gctgtcctta 540
267 tcctcatcga ctggatactt cagaacaag cataacagta gcattggagc aaaggacaca 600
268 gcatggctag aagtagatgc tgcctgctag agatatcatc tcgaattcat ggcatgaaca 660
269 aacgtcgttc atgcagccat gcaggaataa taagctcaga acaggattca ggacaaattc 720
270 aagctatcta caagcttgcc agcatcatca tattataata attgctthta tagtcagcaa 780
271 actcgtacag aatagccaga tccaaatttc cacaaaactat atatcatcat caggaatttt 840
272 aaaaagagaa ctcggaatcg atttcgcatg atattcgagg acaccaagc caaactgacg 900
275 <210> SEQ ID NO: 7
276 <211> LENGTH: 900
277 <212> TYPE: DNA
278 <213> ORGANISM: Oryza sativa
280 <220> FEATURE:
281 <221> NAME/KEY: variation
282 <222> LOCATION: (247)
283 <223> OTHER INFORMATION: /cultivar="hts, mth, yki, krr, mnk, hez, ksh, akk,
284 ank, hnh, ymt, hit, mmm, fom, or knh"

```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 12/20/2004
PATENT APPLICATION: US/10/517,543 TIME: 13:10:37

Input Set : A:\3462.txt
Output Set: N:\CRF4\12202004\J517543.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; N Pos. 636

Seq#:19; N Pos. 3

VERIFICATION SUMMARY

DATE: 12/20/2004

PATENT APPLICATION: US/10/517,543

TIME: 13:10:37

Input Set : A:\3462.txt

Output Set: N:\CRF4\12202004\J517543.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application Number

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:548 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:600

L:754 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0